

REMARKS

By the above amendment, new dependent claims 31 - 34 have been presented which recite further features of the present invention, as discussed below.

At the outset, applicants note that the Examiner has apparently recognized the deficiency of the final rejection based upon Mizuno in combination with Hardikar et al or further in combination with Gallarda et al, as pointed out in the Appeal Brief filed April 10, 2007. Thus, the Examiner has reopened prosecution of this application and set forth a new ground of rejection in which Worster et al (US Patent No. 5,963,314) is substituted for Hardikar et al. However, applicants submit that irrespective of the Examiner's position, the deficiency of Mizuno taken alone or in combination with Gallarda et al is not overcome by the addition of Worster et al, as discussed below.

The rejection of claims 3, 5, 6, 12 - 16 and 25 - 30 under 35 USC 103(a) as being unpatentable over Mizuno in view of Worster et al and the rejection of claims 10, 11 and 20 - 24 under 35 USC 103(a) as being unpatentable over Mizuno and Worster et al further in view of Gallarda et al, such rejections are traversed insofar as they are applicable to the present claims and reconsideration and withdrawal of the rejections are respectfully requested.

At the outset, while the Examiner refers to Worster et al (US Patent No. 5,963,314), applicants note that this patent is a continuation of a prior application which is a division of application No. 08/080,014 filed June 17, 1993 and which issued as US Patent No. 5,479,252 on December 26, 1995, and has the same disclosure as the cited Worster et al patent (5,963,314). In reopening prosecution, the Examiner characterizes at page 3 of the office action the previous arguments of

the Examiner and applicant, with the Examiner indicating that applicant has characterized the previous argument of the Examiner as an illegitimate “obvious to try” test of patentability, and the Examiner now contending a teaching of the deficiencies of Mizuno is found in Worster et al, line 29 in column 13, line 44 and column 14 and illustrated in Fig. 4. Applicants submit that contrary to the position by the Examiner, Worster et al does not overcome the recognized deficiencies of Mizuno in the sense of 35 USC 103, and the Examiner has again engaged in an illegitimate “obvious to try” test of patentability.

More particularly, applicants note that in accordance with Worster et al, under the heading “Summary of the Invention” at column 3, lines 24 - 35 Worster provides:

In one embodiment, the laser imaging system “revisits” defects on production semiconductor wafers, where the defects are first detected (but not analyzed or evaluated) by conventional wafer scanners... (emphasis added).

In accordance with Worster et al, the laser imaging system 100 performs laser imaging of a wafer previously inspected by a conventional wafer scanner, and as described in column 13, lines 12 - 14 “A number of confocal images may be stored in files for subsequent review on or off line from laser imaging system 100”. (emphasis added). While the Examiner contends that columns 13 and 14 of Worster et al in relation to Fig. 4 discloses a display method that displays a defect and a wafer map on the same screen and it would be obvious to utilize the same in Mizuno.

Applicants note as described in column 14, lines 35 - 39 of Worster et al:

The Wafer Map Window displays the defect map of the wafer under inspection the defect map having been produced by a wafer scanner that is not part of laser imaging system 100. (emphasis added).

Therefore, in Worster et al, the defect map is produced by a wafer scanner that is not part of the laser imaging system 100, and actual images of the wafer, if produced by

the wafer scanner that is not part of laser imaging system 100, are not stored or utilized (e.g., the display of the laser imaging system 100 that is, any actual images utilized for display) represent images obtained by the laser imaging system 100 of Worster et al. Thus, Worster et al does not irradiate a substrate, produce an image of the substrate, produce a digital image, compare the digital image with a reference image and extract a defect candidate, nor output an actual image of the extracted defect candidate and data comprising the location of the defect candidate via either a storage medium or a network, nor store the outputted actual images of the extracted defect candidates and data comprising the location of the defect candidate, as recited in claim 5, for example. Likewise, Worster et al does not display on a screen in a map format the defect candidate location data outputted via either the storage medium or network, nor display on the screen a selected one of the stored actual images of the extracted defect candidates which are outputted together with the data comprising the location, in the manner recited in the claims of this application. In order to emphasize such features, applicants have presented dependent claims, dependent upon the independent claims, wherein claims 32 - 34 recite the feature that one system performs at least the various steps so as to enable display of the defect candidate data in map format and the actual image of the defect candidate outputted by the one system. It is apparent that Worster et al does not disclose or teach such features.

With respect to the combination of Worster et al with Mizuno, applicants submit that the Examiner has engaged in a hindsight reconstruction attempt utilizing the illegitimate "obvious to try" test of patentability. As recognized by the Examiner, Mizuno does not disclose or teach such features and applicants note that the

disclosure of Worster et al, as represented by US Patent No. 5,479,252, which issued December 26, 1995 was available prior to the filing of the Mizuno patent application, and it is apparent that while Mizuno discloses outputting of location data of defects which is outputted in a map format, Mizuno does not disclose the display of the actual image which is outputted with the location data on the same screen, as recited in the claims of this application. Worster et al also fails to disclose or teach such features, such that the proposed combination fails to provide the claims features in the sense of 35 USC 103 and all claims should be considered allowable thereover.


As to the further combination with Gallarda et al, applicants submit that Gallarda et al also fails to overcome the aforementioned deficiencies of Mizuno taken alone or Mizuno in combination with Worster et al as pointed out above. Accordingly, applicants submit that all claims also patentably distinguish over this proposed combination of references.

In view of the above amendments and remarks, applicants submit that all claims present in this application patentably distinguish over the cited art and should now be in condition for allowance. Accordingly, issuance of an action of a favorable nature is courteously solicited.

To the extent necessary, applicant's petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing

of this paper, including extension of time fees, to Deposit Account No. 01-2135
(501.41125X00) and please credit any excess fees to such deposit account.

Respectfully submitted,

/Melvin Kraus/ 
Melvin Kraus
Registration No. 22,466
ANTONELLI, TERRY, STOUT & KRAUS, LLP

MK/jla
(703) 312-6600